

BC1524 and BC3012

Automatic Battery Chargers

ys6307
revision A, 21st October 2004
catalogue section 40



Description

The BC1524 and BC3012 range provides fully automatic, heavy duty charging of vented lead acid or NiCd batteries. The chargers may be used in a wide range of industrial battery applications, including standby engines, pumps and generators.

The charger uses an open frame construction, designed for surface mounting in an enclosed panel. Each unit consists of a transformer, rectifier and control circuit. The control circuit ensures that charger maintains the battery voltage at the pre-calibrated float level, while supplying any additional load current up to the specified maximum.

A 'boost' operating mode can be used to provide increased voltage output. Selection of normal or boost mode is via three terminals, allowing activation by a remote panel switch or time relay – see calibration table overleaf for float and boost voltage levels.

A self diagnostic 'charge fail' circuit and relay output is provided as standard. The volt free relay de-energises in the event of a charging fault.

Power for the charger is from a 230VAC or 110VAC supply (please specify at order). All electrical connections are to stripped panel wiring via spring-loaded clamp terminals.

- **Heavy duty float charging: 15A (24V) or 30A (12V) output**
- **Simple, low cost design**
- **Lead acid or Ni-Cd calibrations**
- **Float or boost modes**
- **Charge fail relay output**

Product specification

power supply:	BC1524	BC3012
nominal operating voltages	230 VAC or 110 VAC (specify)	
permissible voltage variation	± 10% of nominal	
nominal operating frequency	50/60 Hz.	
DC charge output:		
maximum current, A DC	15	30
nominal voltage, V DC	24	12
float/boost voltages	see table overleaf	
charge fail output:		
relay type	volt free SPDT contacts, relay de-energised on fault	
contact rating	1A @ 30 VDC (resistive load)	
general:		
operating temperature	-10 to +55 °C	
overall dimensions (w x h x d)	185 x 175 x 135 mm	
weight	approx. 7.8 Kg	

Warranty

A one year limited warranty on materials and workmanship is given with this Murphy product. Details are available on request and at www.fwmurphy.co.uk/warranty.

MURPHY

FW Murphy
PO Box 470248
Tulsa, Oklahoma 74147, USA
tel: +1 918 317 4100
fax: +1 918 317 4266
email: sales@fwmurphy.com
web: www.fwmurphy.com

CONTROL SYSTEMS AND SERVICES DIVISION
PO Box 1819, Rosenberg, Texas 77471, USA
tel: +1 281 633 4500
fax: +1 281 633 4588
email: sales@fwmurphy.com

MURPHY DE MEXICO S.A. DE C.V.
Blvd. Antonio Rocha Cordero 300, Fracción del Aguaje
San Luis Potosí, S.L.P. México 78384
tel: +52 444 8206264
fax: +52 444 8206336
Villahermosa office tel: +52 993 3162117
email: ventasmex@murphymex.com.mx
web: www.murphymex.com.mx

FRANK W. MURPHY LTD.
Church Rd, Laverstock, Salisbury, SP1 1QZ, UK
tel: +44 1722 410055
fax: +44 1722 410088
email: sales@fwmurphy.co.uk
web: www.fwmurphy.co.uk

MURPHY SWITCH OF CALIFORNIA
41343 12th Street West,
Palmdale, CA 93551-1442, USA
tel: +1 661 272 4700
fax: +1 661 947 7570
email: sales@murphyswitch.com
web: www.murphyswitch.com

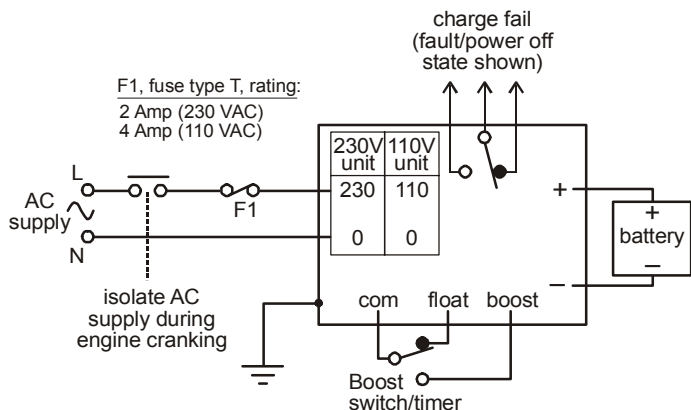
MACQUARRIE CORPORATION
1620 Hume Highway,
Campbellfield, Victoria 3061, Australia
tel: +61 3 9358 5555
fax: +61 3 9358 5558
email: murphy@macquarrie.com.au



USA - ISO9001:2000 FM 28221
UK - ISO9001:2000 FM 29422

In order to consistently bring you the highest quality, full featured products, we reserve the right to change our specifications and designs at any time.

Electrical connection



Notes:

- 1) battery output is isolated from chassis
- 2) chassis must be connected to a low impedance earth
- 3) charge fail relay output is volt-free

Calibration

Battery type*		float volts (VDC)	boost volts (VDC)
12V	Lead acid (6 cells)	13.6	14.1
	Ni-Cd (10 cells)	14.2	14.7
24V	Lead acid (12 cells)	27.2	28.2
	Ni-Cd (18 cells)	25.6	26.6
	Ni-Cd (20 cells)	28.4	29.4

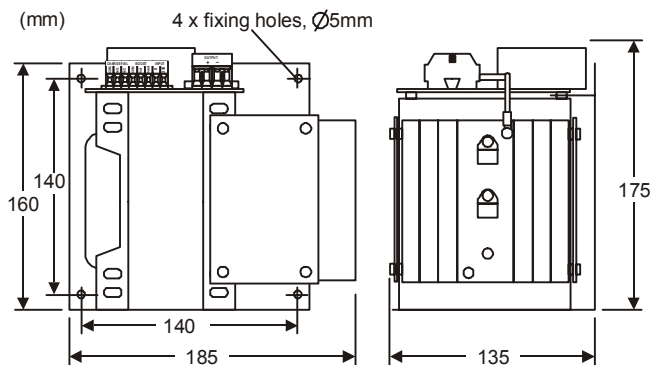
*Note: the BC1524/BC3012 range is designed for use with vented batteries only. These chargers are NOT suitable for valve regulated lead acid (VRLA) or sealed type cells.

How to order

When ordering, please specify:-

Stock Number	Model	Supply voltage, calibration
41.70.0102	BC1524/CLA	110VAC, 24V lead acid
41.70.0103	BC1524/CNC18	110VAC, 18 cell NiCd
41.70.0104	BC1524/CNC20	110VAC, 20 cell NiCd
41.70.0105	BC1524/DLA	230VAC, 24V lead acid
41.70.0106	BC1524/DNC18	230VAC, 18 cell NiCd
41.70.0107	BC1524/DNC20	230VAC, 20 cell NiCd
41.70.0108	BC3012/CLA	110VAC, 12V lead acid
41.70.0109	BC3012/CNC10	110VAC, 10 cell NiCd
41.70.0110	BC3012/DLA	230VAC, 12V lead acid
41.70.0111	BC3012/DNC10	230VAC, 10 cell NiCd

Dimensions



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 Tulsa, Oklahoma 74147, USA
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 fax: +52 444 8206336
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